

REMARKS/ARGUMENTS

The present invention discloses a method for booting a computer system with a memory card.

In the present invention, the terms “booting computer system”, “boot-up”, and “booting” are indicated to the progress of starting up a computer system. However, the term “boot” in all cited references by examiner is indicated to load (boot) O/S into a main memory.

Also, the basic input-output system (BIOS) executes POST (Post On Self Test) to test, and initializes the system components and then loads (boots) the O/S into a main memory. This is a set of routines including the memory check, system bus check and other low-level routines so that the CPU can initialize the computer properly. The device initialization is a CPU initiating and addressing peripheral components such as the floppy disk driver (FDD) and/or the CD-ROM. After the device initialization is completed, the CPU is able to command the FDD. When the FDD is controllable by the CPU, the contents in a floppy can be read.

Accordingly, it is not possible for a floppy disk being a BIOS storage due to the device initialization, because the BIOS execution should be down before the activation of a FDD. If there is a BIOS stored in a floppy disk and it is desired to use it for initializing the computer system, another BIOS must be used to activate the FDD first. Then the BIOS stored in a floppy disk can be read. Therefore, a

BIOS stored in a floppy disk is useless in this booting procedure, because the FDD has already been activated and the initialization is completed. Accordingly, it is a paradox to use a BIOS stored in a floppy disk to initialize the computer system.

Regarding independent claim 1 of the present invention, the Examiner considers that the technical features recited therein are disclosed in the '707 patent in view of the '007 patent. The applicant respectfully disagrees. According to the above-mentioned explanation, after the device initialization is completed, the floppy disk drive (FDD) is able to read the content in a floppy disk. Regarding column 2, lines 41-43 of the prior art '007 reference (Baxter), it is disclosed that "...ROM BIOS 15 including code executable by the CPU 12 for implementing a floppy boot protection system 15a...". It is clear that the prior art '007 (Baxter) also discloses that the device initialization is the premise to use the FDD. So, it is not possible to use a BIOS stored in a floppy to initiate a computer system. Therefore, even combining the prior art '707 (Bell) and '007 (Baxter) still cannot result in the BIOS in the memory card disclosed by the present invention.

Furthermore, the Examiner pointed out column 2, line 62 thru column 3, line 7 of the prior art '007 (Baxter), which involves selecting a path from a list of boot device from a boot table (24) for initiating the computer system. However, regarding column 3, lines 12-34 and Fig. 2 of the prior art '007, the '007 patent also implies that before step 214, the FDD should be initialized. Therefore, the prior art

reference '007 still requires a BIOS to complete the device initialization, otherwise another BIOS stored in a floppy disk cannot be read. So, it is not possible to use a BIOS stored in a floppy to initiate a computer system. Therefore, even combining the prior art '707 (Bell) and '007 (Baxter) still cannot result in the BIOS in the memory card disclosed by the present invention.

Regarding claim 9 of the present invention, the Examiner considers that the '446 patent discloses the technical features recited in the independent claim 9 of the present invention. However, in column 6, lines 5-10 of the prior art '446, it only discloses the floppy disk 27 contains a bootable sector 27b, and a set of routines 27c and the numerals 27b and 27c which is a index or routine for loading O/S, not a part of a BIOS. It is also clear in Fig.3 of the '446 patent, the step 30 "prior bios routines" is a premise to progress the step 32 "floppy disk in drive" and the step 44 "read password on floppy disk". In column 6, lines 33-37 and Fig. 3 of the '446 patent, the FDD 26 should be initialized then the computer can determine whether a floppy disk 27 is in the FDD 26 or not. So, it is clear that without the prior BIOS routines 30 of the '446 patent, the floppy disk drive won't work. Accordingly, the numerals 27b and 27c are not the BIOS disclosed by the present invention. Furthermore, according to the above-mentioned explanation about the BIOS, it is clearly impossible for a floppy disk to be a BIOS storage.

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Regarding independent claim 15 of the present invention, the Examiner considers that the technical features recited therein are disclosed in the '707 patent in view of the '734 patent. The applicant respectfully disagrees. The boot image in '734 patent is not a part of a BIOS. The '734 patent only discloses the technique of booting the computer system from the floppy disk or the CD-ROM disk. However, it is well known to one skilled in this art that neither the floppy disk nor the CD-ROM disk can be a BIOS storage due to the device initialization. Accordingly, the applicant respectfully submits the technical features of the claim 15 of the present application are not capable of being taught, anticipated or inferred by the '707 patent or '734 patent and/or even the combination thereof.

In view of the explanations set forth above, the applicants submit that claim 9 of the present invention is patentably distinct from the cited references Ruppertz (US 5,363,446). Additionally, claim 1 is patentable over the Bell (US 5,410,707) and Baxter (US 6,550,007) references whether taken alone or in combination with one another cited by the examiner. Claim 15 is patentable over the Bell (US 5,410,707) and Jeon (US 6,122,734) references whether taken alone or in combination with one another cited by the examiner. Therefore, the applicant respectfully submits that the independent claims 1, 9 and 15 should be patentable as they are depending on the allowable independent claims 1, 9 and 15, respectively.

Conclusion

The Applicant respectfully submit that no reference cited by the Examiner, renders the present application not novel or not inventive. Furthermore, no cited reference is in the field of applicant's endeavour or reasonably pertinent to the particular problems with which the inventor attempted to cope. That is to say, the cited references alone or in any combination with one another fail to teach any way to solve the problems which the present application overcomes. The present application is patentable over the cited reference, and reconsideration and allowance of the present patent application are earnestly solicited at an early date.

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

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In view of the foregoing remarks, Applicants respectfully submit that the present application, including claims 1-20, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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